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Safety Data Sheet (SDS)

OSHA HazCom Standard 29 CFR 1910.1200(g), Rev. 2012 and GHS Rev 03 SECTION 1: Identification of the substance/mixture and of the company/undertaking

Product identifier

Product form: Trade name: Product code: Recommended application: Mixture Duraclean Ultra Duraclean Ultra Heat Transfer System Cleaner

Details of the supplier of the safety data sheet Duratherm P.O Box 563, Lewiston, NY, 14092

Telephone: 1-905-984-6677 Qualified person's e-mail address: info@durathermfluids.com

Emergency telephone number:

Tel.: 1-905-984-6677

SECTION 2: Hazards identification

Classification of the substance or mixture

Asp. Haz 1 - H304

Label elements

GHS label element:

Hazard pictograms: Signal word:



Hazard Statements: H304 **Precautionary Statements** P301/310/331

Classification system NFPA Rating: Health: 0, Fire:1, Reactivity:0 HMIS Rating: Health: 0, Fire:1, Reactivity:0

Other hazards Other Hazards:

None known

SECTION 3: Composition/information on ingredients

3.1 Substance Not applicable

3.2 Mixture

Chemical Characterization: Classification according to GHS: **Dangerous Components:**

Mixture Not classified Hydrocarbon, <22 cSt

System (GHS) GHS08 Danger

This product is classified and labeled according to the Globally Harmonized

May be fatal if swallowed and enters airways

IF SWALLOWED. Immediately call a POISON CONTROL CENTRE. Do not

induce vomiting

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| DURATHERM |
|----------------------|
| Heat Transfer Fluids |

| Component Name | Identification | Classification according to GHS | % |
|-----------------------|--|------------------------------------|------------------|
| Ester | CAS #: 26761-40-0 | Not classified | 20-75% |
| Hydrocarbon | CAS #: 64742-54-7 CAS #: 64742-47-8 | GHS08 Asp. Haz 1 – H304 | 15-50% 30-45% |
| Proprietary Additives | Trade Secret | Not classified | 5-10% |

SECTION 4: First aid measures

Description of first aid measures

| Inhalation: | Supply person with fresh air and consult doctor according to symptoms. |
|---------------|---|
| Skin contact: | Remove polluted, soaked clothing immediately, wash thoroughly with plenty of water and soap, in case of irritation of the skin (flare), consult a doctor. |
| Eye contact | Remove contact lenses. Wash thoroughly for several minutes using copious water. Seek medical help if necessary. |
| Ingestion | Rinse the mouth thoroughly with water. Do not induce vomiting. Consult doctor immediately. |

Indication of any immediate medical attention and special treatment needed Treat symptomatically

SECTION 5: Firefighting measures

| Suitable extinguishing media: | |
|---------------------------------|--|
| Unsuitable extinguishing media: | |

Water jet spray/foam/CO2/dry extinguisher High volume water jet

Special hazards arising from the substance or mixture

In case of fire the following can develop: Oxides of carbon, toxic gases

Advice for firefighters

In case of fire and/or explosion do not breathe fume use protective respirator with independent air supply. According to size of fire use full protection, if necessary. Cool container at risk with water. Dispose of contaminated extinction water according to official regulations.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions protective equipment: Environmental precautions:

Not required If leakage occurs, dam spillage and resolve leaks as soon as possible. Prevent fluid from entering drainage systems. If fluid accidently enters drainage system alert authorities

Methods and material for containment and cleaning up

Soak up with absorbent material (e.g. universal binding agent, oil-dry, sand, diatomaceous earth) and dispose in accordance with local regulations

Reference to other sections

See section 7 for information on safe handling, see Section 8 for information on personal protection equipment, see Section 13 for disposal information

SECTION 7: Handling and storage

In addition to information given in this section, relevant information can also be found in section 8 and 6.1.

Precautions for safe handling: Information about protection against explosions or fires: Requirements to be met by storerooms:

No special measures required No special measures required Store in a cool dry place

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General guidelines:

Ensure good ventilation; avoid contact with eyes or skin

Notes on general hygiene measures at the workplace General hygiene measures for the handling of chemicals are applicable Wash hands before breaks and at end of work Keep away from food, drink and animal feed Remove contaminated clothing and protective equipment before entering areas in which food is consumed

SECTION 8: Exposure controls/personal protection

Control parameters

No further data; see Section 7

Exposure controls:

Appropriate engineering controls:

Personal protective equipment: Hand protection:

Eye protection: Materials for protective clothing: Hand protection:

Respiratory protection:

Environmental exposure controls: Consumer exposure controls: Other: Contain with oil absorbing material (oil dry). Remove oil absorbing material and dispose lawfully

PVC, neoprene, or nitrite gloves. Gloves should be replaced immediately if damaged or worn
Eye protection necessary where liquid could be splashed or sprayed PVC, neoprene, or nitrite gloves
In case of repeated or prolonged contact wear gloves and use moisturizing skin cream
wIn areas with poor ventilation or in the case of likely misting use appropriate respiratory equipment
See section 12
PVC gloves. Neoprene or nitrile rubber gloves
Wash hands thoroughly after exposure. Do not eat drink or smoke

during use. Wash contaminated clothing before use

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties Physical state: Liquid

Physical state: Color: Odor: Odor threshold: pH-value: Melting point/freezing point: Initial boiling point and boiling range: Flash Point ASTM D92 (COC): **Evaporation Rate:** Flammability (solid, gas) Lower explosive limit: Upper explosive limit: Density @ 20°C: Bulk density: Solubility(ies): Water solubility: Partition coefficient (n-octanol/water) Auto-ignition temperature: Decomposition temperature: Viscosity: Explosive properties Oxidizing properties:

Other information

Miscibility:

Light yellow, clear Characteristic Not determined Not determined Not determined Not determined >195°F (>90°C) NA NA Not determined Not determined 0.84-0.87 g/ml NA Not determined Insoluble Not determined Not determined Not determined 5 cSt @ 40°C NA Not determined

Not determined

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Fat solubility / solvent: Conductivity: Surface tension: Solvents content: Not determined Not determined Not determined Not applicable

SECTION 10: Stability and reactivity

Reactivity: Chemical Stability: Possibility of hazardous reactions: Conditions to avoid: Incompatible materials: Hazardous decomposition products: Stable under normal conditions Stable under normal conditions No dangerous reactions known See section 7 Strong oxidizing agents, acids No dangerous decomposition products known

SECTION 11: Toxicological information

Possibly more information on health effects, see Section 2 (classification).

Acute toxicity:

Not Classified

| DURACLEAN ULTRA | | | | | |
|----------------------------------|----------|-------|---------------|----------|-------|
| Toxicity/effect | Endpoint | Value | Unit | Organism | Notes |
| Acute toxicity, by oral route: | LD50 | >5000 | mg/kg | Rat | |
| Acute toxicity, by dermal route: | LD50 | >2000 | mg/kg | Rat | |
| Acute toxicity, by inhalation: | LD50 | >2500 | mg/kg/ 4hr | Rat | |

Skin corrosion/irritation:

Serious eye damage/irritation: Respiratory or skin sensitization: Repeated does toxicity: Germ cell mutagenicity: Carcinogenicity: Reproductive toxicity: Other information: Not classified – Unlikely to cause harm to harm to skin with brief contact, long term contact may cause dermatitis Not classified Not classified

SECTION 12: Ecological information

| DURACLEAN ULTRA | | | | | |
|-------------------------------------|----------|----------|----------------|----------|--------|
| Toxicity/effect | Endpoint | Value | Unit | Organism | Notes |
| Toxicity to fish: | LD50 | >100,000 | mg/kg /96hr | Trout | |
| Toxicity to daphnia: | | | | | n.d.a. |
| Toxicity to algae: | | | | | n.d.a. |
| Persistence and degradability: | | | | | n.d.a. |
| Bio-accumulative potential: | | | | | n.d.a. |
| Mobility in soil: | | | | | n.d.a. |
| Results of PBT and vPvB assessment: | | | | | n.d.a. |
| Other adverse effects: | | | | | n.d.a. |

SECTION 13: Disposal considerations

Waste treatment methods

For the substance / mixture / residual amounts

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Soaked polluted cloths, paper or other organic materials represent a fire hazard and should be controlled, collected and disposed of

For contaminated packing material

Pay attention to local and national official regulations Empty container completely. Uncontaminated packaging can be recycled. Dispose of packaging that cannot be cleaned in the same manner as the substance. Do not perforate, cut up or weld un-cleaned container.

SECTION 14: Transport information

Transport statements UN number DOT, ADN, IMDG, IATA: ADR: UN proper shipping name: DOT, ADR, ADN, IMDG, IATA: Transport hazard class(es) DOT, ADR, ADN, IMDG, IATA: **Packaging Group** DOT, ADR, IMDG, IATA: **Environmental hazards** Marine pollutant: Special precautions for users: Transport in bulk according to Annex II: of MARPOL 73/78and IB Code UN "Model Regulation"

Non-regulated material Non-regulated material Non-regulated material Non-regulated material No None

Non-regulated material

Not applicable

SECTION 15: Regulatory information

Safety, health and environmental regulations/legislation specific for the substance or mixture SARA Hazards: No SARA Hazards

TSCA (Toxic Substances Control Act):

Hydrocarbon - <22 cSt – CAS# 72623-86-0 All other chemical substances in this mixture are included on or are exempted from listing on the TSCA Inventory for Chemical Substances

US State Regulations

California Prop 65 WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm. Di-isodecyl - CAS #: 26761-40-0

Please note that Section 3 of this document lists only the hazardous components required by the specific country or region hazard communication regulations. The chemical identifiers listed in Section 3 are used globally for hazard communication purposes and may not reflect those used for chemical inventory coverage in a particular country or region. The chemical inventory information given in Section 15 of this document applies to the product as a whole and should be used when evaluating inventory compliance.

The components of this product are reported in the following inventories:

DSL All components of this product are on the Canadian DSL AICS On the inventory, or in compliance with the inventory NZIOC Not in compliance with the inventory ENCS On the inventory, or in compliance with the inventory KECI On the inventory, or in compliance with the inventory PICCS On the inventory, or in compliance with the inventory IECSC On the inventory, or in compliance with the inventory TCSI On the inventory, or in compliance with the inventory US.TSCA On TSCA Inventory

Labeling requirements

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GHS label element:

This product is classified and labeled according to the Globally Harmonized System GHS08 Danger

Hazard pictograms: Signal word

| Component Name | Identification | Classification according to GHS | % |
|-----------------------|-------------------|------------------------------------|--------|
| Ester | CAS #: 53894-23-5 | Not classified | 20-75% |
| Hydrocarbon | CAS #: 8042-47-5 | GHS08 | 20-50% |
| | | Asp. Haz 1 – H304 | |
| Proprietary Additives | Trade Secret | Not classified | 5-10% |

SECTION 16: Other information

These details refer to the product as it is delivered.

The statements made here should describe the product with regard to the necessary safety precautions - they are not meant to guarantee definite characteristics - but they are based on our present up-to-date knowledge.

| Ŭ | Any abbreviations and acronyms used in this document: |
|----------------|--|
| AC | Article Categories |
| acc., acc. to | according, according to |
| ADR | Accord européen relatif au transport international des marchandises Dangereuses par Route |
| Art., Art. no. | Article number |
| ATE | Acute Toxicity Estimate according to Regulation (EC) 1272/2008 (CLP) |
| BOD | Biochemical oxygen demand |
| CAS | Chemical Abstracts Service |
| CEC | Coordinating European Council for the Development of Performance Tests for Fuels, Lubricants |
| CLP | Classification, Labeling and Packaging (REGULATION (EC) No 1272/2008 on classification, |
| | labeling and packaging of substances and mixtures) |
| CTFA | Cosmetic, Toiletry, and Fragrance Association |
| e.g. | for example (abbreviation of Latin 'exempli gratia'), for instance |
| EC | European Community |
| ECHA | European Chemicals Agency |
| EEA | European Economic Area |
| EEC | European Economic Community |
| EINECS | European Inventory of Existing Commercial Chemical Substances |
| ELINCS | European List of Notified Chemical Substances |
| EN | European Norms |
| EPA | United States Environmental Protection Agency (United States of America) |
| ERC | Environmental Release Categories |
| ES | Exposure scenario |
| Fax. | Fax number |
| gen. | general |
| GHS | Globally Harmonized System of Classification and Labelling of Chemicals |
| HMIS | Hazardous Material Identification System |
| IARC | International Agency for Research on Cancer |
| IATA | International Air Transport Association |
| IBC | Intermediate Bulk Container |
| IBC (Code) | International Bulk Chemical (Code) |
| IC | Inhibitory concentration |
| LC | lethal concentration |
| LC50 | lethal concentration 50 percent kill |
| LD50 | Lethal Dose, 50% kill |
| n.a. | not applicable |
| n.av. | not available |
| n.c. | not checked |
| n.d.a. | no data available |
| NFPA | National Fire Protection Association |

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| ppm | parts per million |
|---------|--|
| UN RTDG | United Nations Recommendations on the Transport of Dangerous Goods |
| VOC | Volatile organic compounds |
| WHO | World Health Organization |
| wwt | wet weight |

These statements were made by: Duratherm, P.O Box 563, Lewiston, NY, 14092, Tel.: 1-905-984-6677, info@durathermfluids.com